ABB Multi Drive for Sale

Product Description

Genuine ABB ACS880 Multi Drive System 3 Phase 690-volt supply, rated at 1050 Amps, 50Hz, IP22.

Manufactured at ABB Finland 05 / 2016.

The drive has run a full paper line at a manufacturer based in the UK from 2017 – 2019 with only two years running due to a change in the manufacturing process leading to this ABB Drive System becoming redundant.

The drive is exactly as ABB current offering, in both hardware and software:

- 12 month parts & labour warranty
- Fully services, in full working order
- Huge cost saving compared with new product
- Installation & Commissioning

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Key Features

- Full working order
- Less than 2 years running time
- Fully serviced by expert Drive Service Engineers
- Supplied with full parts and labour warranty
- Full witness test at our Drive Service Facility near Newcastle prior to any purchase
- Installation and Commissioning service available
- Spares availability to year 2041+
- Safe Torque Off Software
- Abvant ABB Safety PPL Section
- Functional safety models
- ARC FLash fibre optic network
- Spares Package Available
- 24/7 Immediate to Site Engineer Support and
- Annual Maintenance Cover available
- Ether Net IP ready
- Fully EMC Compliant

INCOMER SECTION

- ACS207-1050A-7
- 2x ACS880-0600-7 r8i modules
- IP22
- Internal DU/DT filter in R8i
- EMC second environment
- Line Contactor
- Disconnect switch
- Earth grounding switch
- Terminals for UPS
- Aluminium DC buss bars
- Cable supply conductor
- 230v ac control tx
- Electrical disconnect push button on door
- Multimeter for A,V,Kw,Kw hr
- Arc monitoring unit 1 loop including cable(fibres)
- Corrosion Classification coupon in ACU
- Aux transformer
- Bottom Entry/Exit
- ACS-AP-W control panel
- FENA 11 Ethernet IP modules

Section 1 - 160kw

- Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment Terminals for UPS
- DC Switch Disconnect option 230 v aux tx
- ACS-AP-W control panel

Section 2 - 160kw

- Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 3 - 160kw

- Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 4 - 200kw

- Acs880-107-0220a-7 R7i
- 200kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 5 - 7.5kw

- Acs880-107-009a8-7 R5i 7.5kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module
- Acs880-107-0042a-7 R5i 37kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 6 - 110kw

- Acs880-107-0130a-7 R6i 110kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 7 - 37kw

- Acs880-107-0042a-7 R5i 37kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 8 - 15kw

- Acs880-107-0018a-7 R5i 15kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 9 - 7.5kw

- Acs880-107-009a8-7 R5i 7.5kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

SAFETY PLC

- ABB ACS800M PLC Cubicle
- CI858K01 DriveBus Interface

For more information, contact us:
sales@quantum-controls.co.uk or 01661 835 566

Technical data

Mains connection

Voltage and power range	3-phase, UN3 380 to 415 V, +10%/-10% 3-phase, UN5 380 to 500 V, +10%/-10% 3-phase, UN7 525 to 690 V, +10%/-10% Inverter unit (INU) 1.5 to 6000 kW Diode supply unit (DSU) 50 to 5500 kVA IGBT supply unit (ISU) 300 to 6944 kVA Regenerative rectifier unit (RRU) 400 to 6100 kVA
Frequency	50/60 Hz ±5%
Power factor	IGBT supply unit (ISU): - cosφ = 1 (fundamental) - cosφ = 0.99 (total) Diode supply unit (DSU) and regenerative rectifier unit (RRU): - cosφ = 0.98 (fundamental) - cosφ = 0.93 to 0.95 (total)
Efficiency (at nominal power)	98% with DSU and RRU 97.5% with ISU

Motor connection

Voltage	3-phase output voltage 0 to U_{N3} / U_{N5} / U_{N7}
Frequency	0 to ±598 Hz [1) 3)]
Motor control	Direct torque control (DTC)
Torque control	Torque step rise time:
Open loop	- <5 ms with nominal torque
Closed loop	- <5 ms with nominal torque
	Non-linearity:
Open loop	- ± 4% with nominal torque
Closed loop	- ± 3% with nominal torque
Speed control	Static accuracy:
Open loop	- 10% of motor slip
Closed loop	- 0.01% of nominal speed
	Dynamic accuracy:
Open loop	- 0.3 to 0.4% seconds with 100% torque step
Closed loop	- 0.1 to 0.2% seconds with 100% torque step

Product compliance

CE
Low Voltage Directive 2014/35/EU according to EN 61800-5-1:2007
Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU
ATEX Directive 2014/34/EU, EN 50495
Quality assurance system ISO 9001 and
Environmental system ISO 14001
RoHS 2011/65/EU and Delegated Directive (EU) 2015/836
cULus listed according to UL 508A and CSA C22.2 No. 14,
CSA certified according to CSA C22.2 No. 14
RCM, EAC [2)]
TÜV Nord certification for functional safety [5)]
ATEX-certified safe disconnection function and thermistor & PT100 protection functions, Ex II (2) GD [6)]
Marine type approvals, see http://new.abb.com/drives/segments/marine/marine-type-approvals

EMC according to EN 61800-3: 2004 + A1: 2012

1st environment, restricted distribution category C2, as option 1000 A and up to 500 V
2nd environment, unrestricted distribution category C3, as option

Environmental limits

Ambient temperature	
Transport	- 40 to +70°C
Storage	- 40 to +70°C
Operation area	0 to +40°C, no frost allowed
(air-cooled)	+ 40 to 50°C with derating of 1% /1°C 0
(liquid-cooled)	to +45°C, no frost allowed
	+ 45 to +55°C with derating of 0.5%/1°C
Cooling method	
Air-cooled	Dry clean air
Liquid-cooled	Direct liquid-cooling, coolant Antifrogen® L Incoming coolant temperature to module (-x07LC): - 0 to +40°C as standard - +40 to +45°C with derating of 2%/1°C - +45 to +50°C with derating of 2%/1°C or 6%/1 °C 7) Incoming coolant temperature to optional liquid-cooling unit (-1007LC) (fresh water or sea water): - 0 to +36°C as standard - +36 to +46°C with derating of 2%/1°C
Altitude	
0 to 1,000m	Without derating
1,000 to 4,000m	With derating of 1% / 100 m 4)
Relative humidity	5 to 95%, no condensation allowed
Degree of protection	
Air-cooled	IP22 as standard (IP20 cabinet doors open) IP42 or IP54 as option
Liquid-cooled	IP42 as standard (IP20 cabinet doors open) IP54 as option
Paint colour	RAL 9017, RAL 7035
Pollution degree	PD 2
Contamination levels	No conductive dust allowed
Storage	IEC 60721-3-1:1997, Class 1C2 (chemical gases), Class 1S2 (solid particles) *)
Operation	IEC 60721-3-3:2002, Class 3C2 (chemical gases), Class 3S2 (solid particles) *)
Transportation	IEC 60721-3-2:1997, Class 2C2 (chemical gases), Class 2S2 (solid particles) *)
Vibration	IEC 60068-2-6, 10 to 57 Hz 0.075 mm displacement amplitude 57 to 150 Hz 1g Units with marine construction: - Max. 1 mm (peak value 2 to 13.2 Hz) - Max. 0.7 g (13.2 to 100 Hz) sinusoidal

*) C = Chemically active substances
*) S = Mechanically active substances
1) Operation above 120 Hz might require type specific derating, please contact your local ABB office
2) EAC has replaced GOST R
3) For higher operational output frequencies please contact your local ABB office
4) Derating reduced by lower than 40°C ambient temperature
5) For available certificates, see http://new.abb.com/drives/functional-safety
6) Thermistor protection function (+L537+Q971)
PTC/PT100 thermal motor protection (+L513/L514+Q971)
7) See product specific hardware manual for detailed derating rules.

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